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### (11) **EP 2 426 809 A3**

(12)

#### **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3: 13.11.2013 Bulletin 2013/46

(51) Int Cl.: H02J 7/00 (2006.01) H04B 5/00 (2006.01)

H02J 7/02 (2006.01)

(43) Date of publication A2: **07.03.2012 Bulletin 2012/10** 

(21) Application number: 11188583.6

(22) Date of filing: 11.12.2009

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR

HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL

PT RO SE SI SK SM TR

(30) Priority: 12.12.2008 KR 20080126271 29.06.2009 KR 20090058139 03.09.2009 KR 20090082773

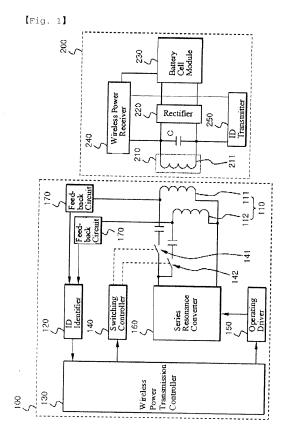
(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC: 09825620.9 / 2 357 716 (71) Applicant: Hanrim Postech Co., Ltd. Gyeonggi-do 440-290 (KR)

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#### (54) Contactless power transmission device

(57)A non-cantact power transmission apparatus accurately determines the kind of object that is placed on the charging deck of the non-contact power transmission apparatus, and, only when a non-contact power receiving apparatus is placed on the power transmission apparatus, allows power transmission and data communication to take place, thereby accurately determining the state of the receiver side and efficiently controlling the transmission of power. In the power transmission apparatus, the power supplied to the non-contact power receiving apparatus is measured, and the output power of the wireless power signal output from two different cores is controlled, thereby allowing the charging operation to be stably conducted even if the non-contact power receiving apparatus is moved anywhere on the power transmission apparatus. The power transmission apparatus improves both the reliability of operation of the noncontact charging system, and the competitiveness of related products, such as portable terminals, battery packs and the like.



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#### **EUROPEAN SEARCH REPORT**

Application Number EP 11 18 8583

Category	Citation of document with in of relevant pass	ndication, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Х	,	V CITY HONG KONG [HK]) 0003-12-17) 17 *	1,2	INV. H02J7/00 H02J7/02 H04B5/00
X Y A	PARTOVI AFSHIN [US] 13 November 2008 (2 * figure 4 * * claim 1 *	MOJO MOBILITY INC [US]; ; SEARS MICHAEL [US]) 008-11-13)  - paragraph [0102] * * *	1,14-16 9,10,12, 13 8	
А	US 2007/114969 A1 ( [US]) 24 May 2007 ( * figure 10 *	MARMAROPOULOS GEORGE 2007-05-24)	8	
Υ	[KR]; KOOK YOON-SAM 2 May 2008 (2008-05 * figure 1 *		9,12,13	TECHNICAL FIELDS SEARCHED (IPC) H02J H04B
Υ	21 August 2008 (200 * figures 4-8 *	 ONISHI KOTA [JP] ET AL) 08-08-21) - paragraph [0145] *	9,10	H01F G06F
Α	US 2007/139000 A1 (AL) 21 June 2007 (2 * figures 5,6 *	KOZUMA YOSUKE [JP] ET 0007-06-21)	9-13	
	The present search report has	been drawn up for all claims		
	Place of search	Date of completion of the search		Examiner
	Munich	4 October 2013	Des	pis, Enguerran
X : part Y : part docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone cicularly relevant if combined with anot iment of the same category inological background written disclosure rmediate document	L : document cited fo	ument, but publise the application r other reasons	shed on, or



**Application Number** 

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CLAIMS INCURRING FEES
The present European patent application comprised at the time of filing claims for which payment was due.
Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):
No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.
LACK OF UNITY OF INVENTION
The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:
see sheet B
All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:
The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



## LACK OF UNITY OF INVENTION SHEET B

**Application Number** 

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-8, 14-16

A non contact power transmission apparatus comprising a board, a shielding plate, and a primary core, comprising two power transmission cores overlapping each other. This non contact power transmission apparatus is housed in a body case wherein a fitting is formed at one side of the body case along which another sub non-contact power transmission slides. This fitting allows another non contact transmission module to slide along.

2. claims: 9-13

A non contact power transmission apparatus comprising a board, a shielding plate, and a primary core, comprising two power transmission cores overlapping each other. An ID requesting signal is transmitted from the non contact power transmission apparatus to an object placed adjacent the primary core. This ID requesting signal allows to detect the presence of a metallic foreign substance.

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#### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 11 18 8583

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

04-10-2013

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